

National Collegiate Athletic Association

SUPPLEMENT NO. 34
DII Mgmt Council 1/99

BASEBALL BAT ISSUE

Two memorandums (dated December 4, 1998, and August 28, 1998) follow that are related to the baseball bat issue. You will receive an oral report during the meeting updating you on the status of this issue.

MEMORANDUM

December 4, 1998

TO: Chief Executive Officers]
Directors of Athletics] -- of NCAA Member Institutions.
Head Baseball Coaches]
Conference Commissioners]

FROM: NCAA Baseball Rules Committee.

SUBJECT: Easton Sports' Recent Letters.

Many of you have received a form communication from Easton Sports asserting Easton's positions regarding implementation of the amendments to the NCAA Baseball Rules regarding high performance aluminum baseball bats. Many of you have also received a letter from Easton's lawyers on the same subject threatening legal action if a member institution or athletics conference decides to implement the new bat rule for the spring 1999 season.

The NCAA Baseball Rules Committee does not wish to interfere in any way regarding individual school or conference decisions relating to which bats to use in the upcoming season. As you know, the NCAA Executive Committee chose to implement the new rule effective August 1, 1999. As you may also know, the Division I Championships/Competition Cabinet and Divisions II and III Championships Committees have considered whether to adopt the new bat standards for the 1999 championships. As of this date, the Divisions I and III will review recommendations to utilize the new bats for the 1999 championships, while Division II will permit the existing bats to be used.

Several conferences have elected to adopt the new bat standard or to use only wood bats for the spring 1999 season, while others have elected to implement the new rule as of August 1, 1999, as required by the NCAA.

It is in response to these decisions by the individual schools, conferences and championships committees that Easton has been conducting its public relations and letter-writing campaigns. The NCAA Baseball Rules Committee believes it is important to set the record straight regarding some of the issues raised and some of the inaccurate information conveyed by Easton's campaign.

The NCAA adopted the new bat rule after a lengthy, careful and fair deliberative process. The baseball rules committee, composed of knowledgeable baseball coaches and administrators with many years of experience, has been concerned about runaway bat performance for many years. In 1988, 1993, 1994, 1995, 1996, 1997 and 1998, the committee studied the issue and took steps that it believed would reasonably curtail ever-increasing aluminum bat performance. The committee's efforts in this regard were not successful, with the result that the performance level of aluminum bats continued to escalate. The committee has continuously monitored available statistics, participated in various studies supported by the manufacturers, and, until recently, trusted the information provided by the bat manufacturers. In some cases, the information has been less than trustworthy.

Alarmed by the continuing increase in performance, the anecdotal and statistical evidence that the game of college baseball has been significantly altered by aluminum bat performance, and concerned about the increased safety risk, the committee determined to study the matter in depth in the summer of 1998. The committee convened a meeting in Kansas City, Missouri, in July 1998. All interested manufacturers, experts, and other knowledgeable persons were invited to make presentations to the committee in open session. The proceedings were stenographically recorded and the results are available should you wish to examine them. The committee was unanimously convinced that bat performance was indeed a safety risk to pitchers and infielders, that there has indeed been a change in the way the college game of baseball is played, and that the available evidence was more than sufficient to justify a change in the rule as soon as practically possible. There is simply no question that aluminum bats substantially outperform traditional wood bats, that the risk of injury to pitchers and infielders is real, and that a performance limit on the aluminum bats was required to bring the game of baseball closer to its traditional form.

It should be noted that the rules committee's decision to adopt the new bat standard was not without support from the collegiate baseball community. In a July 9, 1998, memorandum, the American Baseball Coaches Association (ABCA) requested the rules committee to "develop standards for nonwood bats so they become somewhat comparable to wood bats in weight variance, hitting zone, and rebound effect."

Consequently, the rules committee recommended adoption of the new rule. The Executive Committee's decision to adopt the new rule was communicated to you in Cedric Dempsey's August 28 letter, a copy of which is enclosed for your reference. Nothing that has occurred since the date of Mr. Dempsey's letter, and nothing that Easton has published in its public relations campaign, changes our views regarding this matter.

We believe that a few of Easton's more glaring distortions of information should be corrected. Easton claims that safety is not a legitimate concern. The rules committee, based on its own experience and that of the many coaches, players, parents, umpires and administrators with whom it communicated, is convinced that safety is a legitimate concern. Not only are players being seriously injured, but reports of injuries and near injuries are frequent. The statement by Dr. J. J. Trey Crisco on which Easton relies that the data does not support a conclusion of an increase in injuries has been used by Easton in a misleading way. First, Dr. Crisco acknowledged that the statistics he summarized are statistically limited to a small sample. He also acknowledged that these statistics are based on a period of time in which aluminum bats were nearly the only bats in use, thus providing no opportunity for a "before and after" comparison. Dr. Crisco's statement proves nothing; it is merely a summary that the evidence reviewed by him was nonconclusive. The rules committee is relying on additional evidence that it finds persuasive.

Easton has promoted statistics on bat performance that it claims show that wood bats perform close to aluminum bats, and that even wood bats perform in excess of the new rule. Easton is using extreme examples in a misleading way. Studies conducted on the Baum Hitting Machine, which all experts acknowledge to be the most state-of-the-art testing machine available, show that traditional wood bats when swung at 70 miles per hour (mph) at a ball moving at 70 mph will produce an exit velocity of approximately 93 mph or less. Aluminum bats regularly produce exit velocities in excess of 97 mph under the same conditions. Most experts and the rules committee believe that game conditions result in even higher exit speeds and greater disparity between traditional wood bats and current aluminum bats since light aluminum bats can be swung faster.

Easton claims that a few, very heavy or specialty wood bats will produce exit velocities in excess of 93 mph under the same test conditions. As Easton well knows, these results stem from the use of an unusually heavy or unusually balanced bat being swung by a machine at a fixed speed. Thus, the aberrational result reported by Easton as evidence for its position proves only the misleading nature of Easton's public relations campaign. When Easton says that "the difference between wood and aluminum is very small and some wood bats outperform aluminum bats," it is attempting to mislead you. Likewise, when it says that "most wood" bats fail to meet the NCAA proposed standard of 93 mph, it is misleading you. Traditional wood bats when tested under NCAA standards by independent experts consistently produce exit velocities below 93 mph.

Easton also claims that pitchers have adequate reaction time to avoid being struck by batted balls. Again, Easton is using the scientific evidence very selectively. Most of the experts providing information to the Baseball Rules Committee believe that a collegiate pitcher needs approximately .4 seconds to react and move to avoid being struck. There is some information that some persons can react more quickly; Easton publishes only this side of the story. Most baseball experts believe that a pitcher is between 51 and 52 feet away from the point of impact between the bat and ball at the time of impact, usually in an off-balance position with his glove down and back, and his weight moving forward. At 94 mph the ball will travel 52 feet in approximately .371 seconds. Game conditions using high power aluminum bats often result in speeds well in excess of 100 mph. At 100 mph, the ball will travel 52 feet in .354 seconds; at 110 mph, a ball will travel 52 feet in .321 seconds. The NCAA Baseball Rules Committee is aware that there is some risk even with wood bats, but believes that the increased risk of injury resulting from the use of high powered aluminum bats is clear. To ignore this risk would, in our opinion, be irresponsible.

The committee's recommendation is also a reflection of its concern with the impact the higher performance bats have had on the way the game is played. During the 1998 College World Series, a total of 48 records were broken and 32 were tied. In addition, in the championship game Southern California defeated Arizona State 21-14. One of the more telling statistics was that there were 62 home runs hit, compared to the previous record of 48 set in 1995.

The high-powered aluminum bats have larger sweet spots as well as greater power. They also can be swung faster, allowing the batter to make more frequent good contact with the ball. Consequently, hitting, slugging, pitching and other statistics relating to the game reflect the increased power of hitters to hit farther, harder, and more frequently. Studies by Bill Thurston, secretary-rules editor of the rules committee, have shown that the same batters show a drop in batting averages of approximately 100 points when switching from aluminum to wood bats during the summer Cape Cod League while facing essentially the same pitching. Other statistics abundantly support the same conclusion. Easton has selected a few statistics in a misleading way to attempt to contradict this conclusion. Easton's selected statistics are misleading and do not persuade the committee.

In short, the committee remains convinced it made the right decision based on abundant evidence and a fair process. We hope that this information will assist you in discharging your responsibilities independently and with care.

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MEMORANDUM

August 28, 1998

TO: Chief Executive Officers]
Directors of Athletics] -- of NCAA Member Institutions.
Head Baseball Coaches]
Conference Commissioners]

FROM: Cedric W. Dempsey.

SUBJECT: Baseball Bat Safety.

The NCAA Executive Committee has asked me to share with you some important information about baseball bat safety and to ask you to take all necessary steps to enhance the safety of your collegiate baseball players during the 1998-99 season.

As you may know, the Executive Committee voted at its August 12, 1998, meeting to adopt a change in nonwood bat specifications recommended by the NCAA Baseball Rules Committee and approved by the NCAA Division I Championships/Competition Cabinet and Divisions II and III Championship Committees. The Rules Committee's recommendations were made after considerable deliberation and input from a variety of sources, including technical experts and bat manufacturers. The changes will make metal bats perform more like wood bats and will go into effect August 1, 1999.

The changes will make metal bats heavier, which should decrease bat swing speed. Additionally, the rule will specify for the first time a maximum allowable batted-ball exit velocity, 93 miles per hour, plus one mile per hour to allow for test variance. To meet this standard, manufacturers will be required to submit their bats for certification to an independent testing group connected with the College of Engineering at the University of Massachusetts at Lowell.

The Executive Committee changed the bat specifications to enhance player safety, to restore the competitive balance in the game between offense and defense, and to preserve the integrity of the game. To assure that proper testing of the new bats could take place and that such bats would be available, the Executive Committee chose an implementation date of August 1, 1999, rather than the January 1, 1999, date originally proposed by the Baseball Rules Committee.

The Executive Committee believes it important, however, that during the 1998 fall baseball season and the 1999 spring season, NCAA members take into consideration the available research data regarding safety issues that led in part to the rule change. Participation in sports requires acceptance of some risk. The Executive Committee, however, encourages you to take all necessary steps to enhance baseball player safety this fall and during the 1999 spring season.

One critical piece of information concerns the time a pitcher has to react to a ball that is hit with a bat.

Following release of the ball and follow through, a collegiate baseball pitcher is approximately 54 feet from the impact point where bat meets ball. Research indicates that the average time to react to a ball hit from that distance is approximately 0.4 seconds. The ball-exit velocity that matches this reaction time is 93 miles per hour. Ball-exit velocities from metal bats currently in use in collegiate play have been measured from 103 to 113 miles per hour, translating to a reaction time of 0.357 to 0.315 seconds at a distance of 54 feet. Therefore, there is a window of time during which a collegiate baseball pitcher could be vulnerable to being struck by a batted ball.

To be weighed against that analysis is information that, statistically, baseball has a low practice and game injury rate relative to the 14 regular-season sports currently monitored by the NCAA. Additionally, from 1993 to 1998, the NCAA Injury Surveillance System (ISS) has shown that game injuries to pitchers impacted with a batted ball have remained steady at 3 percent of reported injuries requiring medical attention and restricting participation or performance for at least one day.

Recent data collected over the past season in Division I, however, show that the frequency of pitchers impacted with a batted ball is greater than might be expected from the ISS data. Surveys were distributed to athletic trainers at each Division I institution sponsoring baseball (273 schools) in January 1998 in an attempt to quantify the frequency of pitchers impacted by a batted ball. There were no minimum injury criteria; if the pitcher was unable to react to the ball and was hit, the incident was to be reported. Batted balls that were deflected by the pitcher's glove and did not contact the body were not recorded. Following analysis of the data from 88 schools that initially reported and from a follow-up sample of 30 schools that did not initially report, it was projected that approximately 375 incidents of pitchers impacted with a batted ball occurred this past season in Division I baseball games alone.

While a majority of these impacts involved minimal injury, 11 percent required a physician's medical attention. The frequency of such occurrences was greater than might have been anticipated in the ISS data but was explainable by the window of vulnerability that appears to exist in the current college game.

While time was insufficient to collect and analyze data from Divisions II and III, similar risk may exist for players at those levels. Additionally, there is a small, but measurable, risk of pitchers being impacted with a batted ball during practice.

The NCAA will continue to gather and analyze injury data to meet its obligation to have game rules that minimize risk. In addition, the NCAA is collecting anecdotal information about player injuries. A chart outlining newspaper accounts of some incidents of player injuries is enclosed.

Two other related items of interest include umpire positioning and titanium softball bats. In the last year, the NCAA National Umpire Committee has moved the third-base umpire in a three-man system 20 feet back from behind the pitching mound to in front of second base because of concerns that umpires cannot react fast enough to batted balls at that distance. In addition, the NCAA's Administrative Committee approved a 1995 recommendation of the Division I Softball Committee that banned the use of titanium softball bats at the Division I Softball Championship. The Administrative Committee noted in its decision that unsafe playing conditions for student-athletes was a concern of coaches and administrators as a result of this high-performing bat.

Given this information, the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports has made the following statement:

The NCAA Committee on Competitive Safeguards and Medical Aspects of Sports is very concerned about the potential of serious injury from batted balls in the sport of baseball and supports research in this area. We are very pleased to see the bat manufacturers and administrative bodies coming together to address this issue in an objective and expedient manner. It is our desire that this combined endeavor will promote increased safety for the student-athlete.

To this end, the NCAA supports proposed research to be sponsored by metal bat manufacturers to conduct field testing of bats. Major League Baseball and Rawlings Sporting Goods Company, Inc., have agreed to purchase state-of-the-art equipment for collegiate bat testing by an independent testing group in a laboratory setting. The NCAA also will conduct random testing of bats to ensure they meet the new NCAA standards.

It will, of course, be some time before this current phase of the research is completed and can be analyzed to evaluate bat safety. In the meantime, the NCAA believes that the data that have been shared with you in this letter -- insufficient pitcher reaction time, frequency and severity of injury, anecdotal injury reports, the banning of titanium bats in softball, and the modification of umpire positioning -- describe a situation that warrants your careful attention.

Please use this letter as an opportunity to discuss baseball player safety and to determine whatever efforts are appropriate to minimize risk at your institution and in your conference. The NCAA appreciates your time and attention to this important matter.

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